

What is claimed is:-

1. A crosslinkable polymer composition in the form of its aqueous polymer dispersion or polymer powder, comprised of:

A) a copolymer having a glass transition temperature T_g or a melting temperature of $\geq 30^\circ\text{C}$ and containing units derived from one or more comonomers selected from the group consisting of vinyl esters of branched or unbranched alkylcarboxylic acids of 1 to 18 carbon atoms, acrylic esters or methacrylic esters of branched or unbranched alcohols of 1 to 15 carbon atoms, dienes, olefins, vinyl aromatics and vinyl halides and from 0.1 to 50% by weight, based on the total weight of the comonomers, of one or more ethylenically unsaturated carboxyl-containing comonomers, and

B) a copolymer containing units derived from one or more comonomers selected from the group consisting of vinyl esters of branched or unbranched alkylcarboxylic acids of 1 to 18 carbon atoms, acrylic esters or methacrylic esters of branched or unbranched alcohols of 1 to 15 carbon atoms, dienes, olefins, vinyl aromatics and vinyl halides and from 0.1 to 50% by weight, based on the total weight of the comonomers, of one or more ethylenically unsaturated comonomers having functional groups capable of entering a covalent bond with the carboxyl groups of said copolymer A).

2. A crosslinkable polymer composition as claimed in claim 1, wherein said carboxyl-containing comonomers copolymerized for said copolymer A) are ethylenically unsaturated mono- and dicarboxylic acids or maleic anhydride.

3. A crosslinkable polymer composition as claimed in claim 2, wherein one or more comonomers are selected from the group consisting of acrylic acid, methacrylic acid, crotonic acid, itaconic acid, fumaric acid, maleic acid and maleic anhydride.

4. A crosslinkable polymer composition as claimed in claim 1, wherein said copolymer A) contains 1 to 30% by weight of carboxyl-containing comonomer units.

5. A crosslinkable polymer composition as claimed in claim 1, wherein said copolymer B) comonomers having crosslinking, functional groups include one or more selected from the group consisting of comonomers having an epoxide, organo, halogen, hydroxyl, aziridine, carbodiimide, oxazoline, alcohol, amine, aminosilane, amino-formaldehyde, isocyanate and N-2-hydroxyalkylamide moiety.

6. A crosslinkable polymer composition as claimed in claim 5, wherein one or more ethylenically unsaturated comonomers having epoxide, hydroxyl and isocyanate groups have been copolymerized.

7. A crosslinkable polymer composition as claimed in claim 6, wherein one or more comonomers are selected from the group consisting of glycidyl acrylate, glycidyl methacrylate, allyl glycidyl ether, vinyl glycidyl ether, hydroxyethyl acrylate, hydroxypropyl acrylate, hydroxybutyl acrylate, hydroxyethyl

methacrylate, hydroxypropyl methacrylate, hydroxybutyl methacrylate, 2-methyl-2-isocyanatopropyl methacrylate and isopropenyl dimethylbenzyl isocyanate (TMI).

8. A crosslinkable polymer composition as claimed in claim 1, wherein said copolymer B) contains 1 to 30% by weight of units derived from comonomers containing crosslinking groups, based on the total weight of the comonomers.

9. A crosslinkable polymer composition as claimed in claim 1, wherein the blend ratio of said two copolymers A) and B) is in the range from 1:99 to 99:1.

10. A crosslinkable polymer composition as claimed in claim 1, wherein said copolymers A) and B) are present in such a ratio that the molar ratio of functional comonomer units of copolymer A) to copolymer B) is in the range from 5:1 to 1:5.

11. A crosslinkable polymer composition as claimed in claim 1, wherein said copolymers A) and B) are present in such a ratio that the molar ratio of functional comonomer units of copolymer A) to copolymer B) is in the range from 2:1 to 1:2.

12. A crosslinkable polymer composition as claimed in claim 1, wherein said copolymer A) is a carboxyl-functional styrene-n-butyl acrylate and/or styrene-methyl methacrylate-n-butyl acrylate copolymer and said copolymer B) is a glycidyl methacrylate-

containing styrene-n-butyl acrylate and/or styrene-methyl methacrylate-n-butyl acrylate copolymer.

13. A process for preparing crosslinkable polymer compositions as claimed in claim 1, which comprises preparing said copolymer A) and said copolymer B) by solution or aqueous emulsion polymerization.

14. A process as claimed in claim 13, wherein both said copolymer A) and said copolymer B) are prepared by emulsion polymerization and, optionally, the thereby obtainable dispersions are dried.

15. A process as claimed in claim 14, wherein said emulsion-polymerized aqueous dispersions obtained for said copolymers A) and B) are blended with each other and subsequently dried.

16. A process as claimed in claim 14, wherein said emulsion-polymerized aqueous dispersion obtained for said copolymers A) and B) are each initially dried and said copolymers A) and B) are blended in the specified blend ratio in powder form.

17. A method for preparing shaped articles from fibrous or particulate materials, which comprise contacting said materials with the crosslinkable composition of claim 1 as at least one binder and effecting crosslinking of said materials.

18. The method of claim 17, wherein said polymer composition is

present in an amount of 3 to 50% by weight, based on the material to be bound.

19. The method of claim 17, wherein said polymer composition is present in dry, pulverulent form, in the form of an aqueous dispersion or in solvent-dissolved form.

20. The method of claim 17, wherein said polymer composition is present as a water-redispersible powder.

21. The method of claim 17, wherein said polymer composition is present as a prebinder in fiber mats, wovens and nonwoven scrims for fiber-reinforced plastics.

22. The method of claim 17, wherein said polymer composition is present as a binder for preforming applications of wovens and nonwoven scrims in fiber-reinforced plastics.

23. The method of claim 17, wherein said polymer composition is present as a dry binder in combination with other pulverulent organic or inorganic substances.

24. The method of claim 17, wherein said polymer composition is present as a binder for laminating fiber mats onto expanding or expanded bead foam.

25. The method of claim 17, wherein said polymer composition is

present for laminating two or more wovens, nonwoven scrims or nonwovens together, as a binder between the two substrates to be adhered together.

26. The method of claim 17, wherein said polymer composition is present in powder form for binding pulverulent substrates in fiber materials.

27. The method of claim 17, wherein said polymer composition is present for in-mold skinning of expanding ^{particle} bead foam.

ll
H2 02.19.01